

LS M07A: BASIC MATH SKILLS I

Originator

slbassi

Co-Contributor(s)
Name(s)

Herzig, Jolie (Jherzig)

College

Moorpark College

Discipline (CB01A)

LS - Learning Skills

Course Number (CB01B)

M07A

Course Title (CB02)

Basic Math Skills I

Banner/Short Title

Basic Math Skills I

Credit Type

Credit

Start Term

Spring 2020

Catalog Course Description

Introduces foundational math concepts designed for students with math anxiety, or those who have difficulty understanding and applying mathematical concepts. Covers basic operations with whole numbers, decimals, and fractions. Applies introductory math test-taking strategies and mnemonic skills for learning and recalling math operations that can be used in subsequent math courses.

Additional Catalog Notes

Provides instruction designed to meet the educational needs of students with or without disabilities. Does NOT apply to Associate Degree.

Taxonomy of Programs (TOP) Code (CB03)

4930.32 - Learning Skills, Learning Disabled

Course Credit Status (CB04)

C (Credit - Not Degree Applicable)

Course Transfer Status (CB05) (select one only)

C (Not transferable);

Course Basic Skills Status (CB08)

B - The Course is a Basic Skills Course

SAM Priority Code (CB09)

E - Non-Occupational

Course Cooperative Work Experience Education Status (CB10)

N - Is Not Part of a Cooperative Work Experience Education Program

Course Classification Status (CB11)

Y - Credit Course

Educational Assistance Class Instruction (Approved Special Class) (CB13)

S - The Course is an Approved Special Class

Course Prior to Transfer Level (CB21)

Y - Not Applicable

Course Noncredit Category (CB22)

Y - Credit Course

Funding Agency Category (CB23)

Y - Not Applicable (Funding Not Used)

Course Program Status (CB24)

2 - Not Program Applicable

General Education Status (CB25)

Y - Not Applicable

Support Course Status (CB26)

N - Course is not a support course

Field trips

Will not be required

Grading method

Letter Graded

Alternate grading methods

Student Option- Letter/Pass
Pass/No Pass Grading

Does this course require an instructional materials fee?

No

Repeatable for Credit

No

Is this course part of a family?

No

Units and Hours

Carnegie Unit Override

No

In-Class

Lecture

Minimum Contact/In-Class Lecture Hours

52.5

Maximum Contact/In-Class Lecture Hours

52.5

Activity

Laboratory

Total in-Class

Total in-Class

Total Minimum Contact/In-Class Hours

52.5

Total Maximum Contact/In-Class Hours

52.5

Outside-of-Class

Internship/Cooperative Work Experience

Paid

Unpaid

Total Outside-of-Class

Total Outside-of-Class

Minimum Outside-of-Class Hours

105

Maximum Outside-of-Class Hours

105

Total Student Learning

Total Student Learning

Total Minimum Student Learning Hours

157.5

Total Maximum Student Learning Hours

157.5

Minimum Units (CB07)

3

Maximum Units (CB06)

3

Student Learning Outcomes (CSLOs)

Upon satisfactory completion of the course, students will be able to:

- | | |
|---|---|
| 1 | prepare for upcoming exams by creating a pre-test for the exam. |
| 2 | monitor their grades throughout the course. |

Course Objectives

Upon satisfactory completion of the course, students will be able to:

- | | |
|----|--|
| 1 | organize and manage an academic binder. |
| 2 | identify learning styles and strategies. |
| 3 | Apply strategies to reduce test anxiety. |
| 4 | develop pre-test strategies. |
| 5 | create mnemonic strategies to remember math formulas. |
| 6 | read and round whole numbers. |
| 7 | evaluate powers and square roots. |
| 8 | solve word problems involving whole numbers, fractions, and/or decimals. |
| 9 | solve problems using the order of operations. |
| 10 | employ divisibility rules when factoring primes. |
| 11 | simplify complex fractions. |
| 12 | compare fractions. |
| 13 | apply decimal knowledge to be able to read, write, and round decimals. |
| 14 | solve problems which involve adding, subtracting, multiplying and dividing decimals. |
| 15 | add, subtract, multiply, and divide fractions with like and unlike denominators. |
| 16 | compare decimals. |

Course Content

Lecture/Course Content

- 1. (15%) - Organization and Study Skills**
 - Binder organization
 - Learning styles and strategies
 - Test anxiety
 - Mnemonic strategies
- 2. (10%) - Whole Numbers, Powers, and Square Roots**
 - Reading and rounding whole numbers
 - Evaluating exponents and square roots
 - Applications involving whole numbers
- 3. (25%) - Division, Order of Operations, and Factoring into Prime Numbers**
 - Dividing numbers with and without remainders
 - Order of operations
 - Primes, divisibility, and factoring into primes
 - Division word problems
- 4. (30%) - Fractions**
 - Equivalent fractions
 - Mixed numbers
 - Adding, subtracting, multiplying, and dividing fractions with like and unlike denominators
 - Adding, subtracting, multiplying, and dividing mixed numbers
 - Fractional parts of numbers
 - Finding the least common denominator
 - Complex fractions
 - Comparing fractions
 - Applications involving fractions
- 5. (20%) - Decimals**
 - Reading, writing, and rounding decimals
 - Adding, subtracting, multiplying, and dividing decimals
 - Converting fractions and decimals
 - Comparing decimals
 - Operations with both fractions and decimals
 - Applications involving decimals

Laboratory or Activity Content

Group in-class assignments related to the daily lesson.

Methods of Evaluation

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):

Problem solving exercises
Skills demonstrations

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

Classroom Discussion
Computational homework
Objective exams
Projects
Problem-solving exams
Skills demonstrations
Skill tests

Instructional Methodology

Specify the methods of instruction that may be employed in this course

Collaborative group work
Class activities
Class discussions
Group discussions
Instructor-guided use of technology
Lecture
Small group activities

Describe specific examples of the methods the instructor will use:

Professor will lecture new content using flashcards and multiple color markers to express steps of solving equations.

Representative Course Assignments**Writing Assignments**

- Practice homework problems on fractions, decimals, and percentages selected from the textbook.
- Complete in-class and homework assignments pertaining to current class lesson topics.
- Use flash cards to write math procedures.

Critical Thinking Assignments

- Organize math notes and flash cards for easy retrieval.
- Estimate possible answers using numerical knowledge.
- Solve word problems using mnemonic strategies.

Reading Assignments

- Read the textbook to understand such topics as how to analyze denominators of different fractions.
- Read the sections in the textbook in advance of the next meeting's topics.

Skills Demonstrations

- Demonstrate how to prepare and study for exams by creating note cards.
- Demonstrate the ability to create a pretest using the study guide provided.

Outside Assignments**Representative Outside Assignments**

- Assigned homework problems selected from the textbook.
- Create a practice math test for upcoming exams in groups or individually.
- Assigned reading material from the textbook on such topics as what are prime numbers and how can a number be broken into a product of primes.

Articulation**Comparable Courses within the VCCCD**

LS R016A - Fundamentals of Mathematics I

LS V07 - LS: Fundamentals of Math

Textbooks and Lab Manuals**Resource Type**

Textbook

Classic Textbook

Yes

Description

Staszkow, Ronald. *Math Skills: Arithmetic with Introductory Algebra and Geometry*. 7th ed. Kendall Hunt, 2008.

Resource Type

Textbook

Description

Tussy, Alan, and Diane Koenig. *Basic Mathematics with Early Integers*. 6th ed. Cengage, 2018.

Resource Type

Textbook

Description

Tobey, John, et al. *Basic College Mathematics*. 8th ed. Pearson, 2017.

Library Resources

Assignments requiring library resources

None

Sufficient Library Resources exist

Yes

Primary Minimum Qualification

SPECIAL EDUCATION

Review and Approval Dates

Department Chair

10/28/2019

Dean

10/28/2019

Technical Review

11/07/2019

Curriculum Committee

11/19/2019

DTRW-I

MM/DD/YYYY

Curriculum Committee

MM/DD/YYYY

Board

MM/DD/YYYY

CCCCO

12/04/2019

Control Number

CCC000428707

DOE/accreditation approval date

MM/DD/YYYY